

## **Institution 1**

### **Use Case 1.0 Item Development**

#### **JISC Digital Repositories Programme**

**Actors:** Course manager, medical lecturers/guest speakers, OSCE trainees, subject experts, item bank

**Summary:**

Course managers look after individual courses, or modules, within Medicine at the institution. They hold at least one assessment item bank each, which all contribute to high stakes assessment. They ask lecturers to contribute assessment items and also contribute themselves.

**Trigger state:**

Question levels are inadequate to meet the needs of forthcoming exams

**Common course of events:**

1. Lecturers/guest speakers are asked to produce one question per lecture.
2. People attending OSCE training are asked to write one OSCE as part of the training.
3. Course managers look at their question banks and compare the number of questions in each category against the requirements for the coming academic year.
4. Areas of weakness are identified and subject experts in the relevant fields are contacted asking them to write questions in the specified area (including course managers).

**Post-conditions:**

Questions ready to be quality assured.

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**Date:**

10<sup>th</sup> April 2006

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## **Institution 1**

### **Use Case 2.0 Quality Assurance**

#### **JISC Digital Repositories Programme**

**Actors:** Course managers, author(s), item bank

**Summary:**

The course managers assess structure and grammar of the questions they receive and rely on subject experts for content. The review of questions is done in groups; review of the exam as a whole.

**Trigger state:**

Questions have been written and are ready for review.

**Common course of events:**

1. Course managers assess the content, structure and grammar, then add the questions to their item banks.

**Extensions:**

- 1a. If there are problems with the questions, the course managers may contact the author to clarify before deciding whether to accept or reject the assessment item into the bank.

**Post-conditions:**

If accepted, questions are ready to be used in examinations.

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**Date:**

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## **Institution 1**

### **Use Case 3.0 Item Selection**

#### **JISC Digital Repositories Programme**

**Actors:** Course manager, exam coordinator, item bank

**Summary:**

Each course manager selects a number and variety of questions for use in an exam, specified by the phase coordinator, that gives a good spread of questions for that course. There are four exams; two summative in year two and two formative in year three.

**Trigger state:**

Questions have been entered into the bank, reviewed and accepted. Phase coordinator contacts course managers.

**Common course of events:**

1. Exam coordinators contact each course manager to let them know how many questions are required from each course.
2. Course managers then select an even spread of questions from item bank and send them to the appropriate exam coordinator via e-mail or hard copy.
3. The course manager will then select questions based on what they believe to be a fair representation of the course as a whole.

**Post-conditions:**

The questions have been selected and the exam paper is ready to be created.

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## **Institution 1**

### **Use Case 4.0 Exam Delivery**

#### **JISC Digital Repositories Programme**

**Actors:** Phase coordinator, students, external examiners, course manager

**Summary:**

The phase coordinator compiles and quality assures the exam paper, ensuring that the paper as a whole represents the entire phase. The paper is then sent to an external examiner for a final check before being used in the exam.

**Trigger state:**

Questions have been entered into the bank, reviewed and accepted.

**Common course of events:**

1. The phase coordinator creates the exam paper electronically using what they believe to be a fair representation of the course as a whole.
2. The exam paper is then emailed to external examiners for a final check before being undertaken by the students.

**Extensions:**

- 1a. If the phase coordinator has any queries regarding the questions, he/she may need to contact the course manager to discuss and if necessary change or update the selection.

**Post-conditions:**

The exam has been taken and results data is ready for analysis.

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## **Institution 1**

### **Use Case 5.0 Results Analysis**

#### **JISC Digital Repositories Programme**

**Actors:** Course managers, exam administrators, Speedwell system, item bank

**Summary:**

Once questions have been used in exams their performance data can be extracted from the Speedwell marking system and manipulated into a useful format. Performance data such as total number of students attempting question, number of correct / incorrect responses, quintiles and correlation is collated.

**Trigger state:**

The exam has been carried out.

**Common course of events:**

1. Data is extracted from Speedwell by exam admin and question performance data is made available to course managers.
2. Once course managers have the performance data, they are required to use a hardcopy of the exam paper to link the performance data to the items in their own question bank, as there is no unique ID displayed on the Speedwell report which links both sets of data.
3. Questions with negative correlation are flagged up for review.

**Post-conditions:**

Question performance can be assessed and as a result can be improved or discarded.

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